

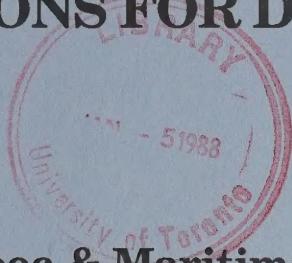
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NATIONAL ENERGY BOARD REASONS FOR DECISION



Trans Québec & Maritimes Pipeline Inc.

Application dated 6 April 1987, as amended,
for new tolls effective
1 January 1987 and 1 January 1988

RH-4-87

November 1987

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Recital, Appearances and Intervenors

IN THE MATTER OF the National Energy Board Act and the Regulations made thereunder; and

IN THE MATTER OF an application by Trans Québec & Maritimes Pipeline Inc. for certain orders respecting tolls under Part IV of the National Energy Board Act, filed with the Board under File No. 1562-T28-7.

Examined by way of written submission and a public hearing held in Ottawa, Ontario on 28, 29 and 30 September and 1 October 1987.

BEFORE:

A.B. Gilmour	Presiding Member
J.R. Jenkins	Member
W.G. Stewart	Member

APPEARANCES AT THE PUBLIC HEARING:

Trans Québec & Maritimes Pipeline Inc.	L.-A. Leclerc J.W. Beames, Q.C.
Canadian Petroleum Association	C.K. Yates
Consumers' Gas Company Ltd., The	J.H. Farrell
Minister of Energy for Ontario	P.D. Morris
NOVA Corporation of Alberta	N.G. Costeloe
Procureur général du Québec	J. Robitaille
Société d'Électrolyse et de Chimie Alcan Limitée	A.M. Bigué
Union Gas Limited	G.A. Aarssen
National Energy Board	F.J. Morel D. Tremblay-Lamer

INTERVENORS TO HEARING ORDER RH-4-87:

Alberta Petroleum Marketing Commission

Canadian Petroleum Association

Consumers' Gas Company Ltd., The

Dome Petroleum Limited

Foothills Pipe Lines (Yukon) Ltd.

Gaz Métropolitain, inc.

Independent Petroleum Association of Canada

Industrial Gas Users Association

Interprovincial Pipe Line Limited

Minister of Energy for Ontario

NOVA Corporation of Alberta

Procureur général du Québec

PSR Gas Ventures Inc.

Société d'Électrolyse et de Chimie Alcan Limitée

SOQUIP

TransCanada PipeLines Limited

Union Gas Limited

Westcoast Transmission Company Limited

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Abbreviations

Act	National Energy Board Act
AFUDC	Allowance for Funds Used During Construction
Base Year	1 January to 31 December 1986
Board NEB	National Energy Board
Company TQM	Trans Québec & Maritimes Pipeline Inc.
CPA	Canadian Petroleum Association
CPI	Consumer Price Index
C.S.S.T.	Commission de Santé et Sécurité au Travail
DCF	Discounted Cash Flow
GMi	Gaz Métropolitain, inc.
Long-Canada	Long-term Government of Canada Bond
NOVA	NOVA Corporation of Alberta
Ontario	Minister of Energy for Ontario
O&M	Operating and Maintenance
PBSA	Pension Benefits Standards Act
Test Years	1 January 1987 to 31 December 1987, and 1 January 1988 to 31 December 1988
TransCanada	TransCanada PipeLines Limited
August 1986 TQM Reasons for Decision	National Energy Board Reasons for Decision in the Matter of an application by Trans Québec & Maritimes Pipeline Inc. under Part IV of the National Energy Board Act - August 1986.
13-Point Average	An average determined by aggregating the balance at the opening of a year and the balances at the end of each month of the year, and dividing by thirteen. Over the years, the Board and others have referred to an average determined in this fashion as a 13-month average.

Overview

(NOTE: This overview is provided solely for the convenience of the reader and does not constitute part of this Decision or the Reasons, to which readers are referred for the detailed text and tables.)

The Application

On 6 April 1987, TQM applied to the Board for new tolls to be effective 1 January 1987 and 1 January 1988.

The main features of TQM's application included a decrease in depreciation and amortization expense of 14.12 percent in 1987 and 19.63 percent in 1988, a requested increase in the Company's common equity ratio from 25 percent to an average of 26.70 percent for 1987 and 28 percent for 1988, and an applied-for increase in the rate of return on equity from 13.50 percent to 14.75 percent for 1987 and 15 percent for 1988. The resultant tolls would decrease by 4.54 percent in 1987 and by a further 4.85 percent in 1988.

Board Procedure

Rate of return issues were addressed in a public hearing that ran from 28 September 1987 to 1 October 1987, while all other issues were addressed by written submission.

Revenue Requirement

TQM forecasted a decrease in revenue requirement for 1987 of about \$3.7 million or 4.54 percent from the \$82.0 million previously approved by the Board for the 1986 test year, and a further decrease of \$3.8 million or 4.85 percent for 1988. These decreases resulted primarily from the decrease in return resulting from the decline in rate base due to depreciation, as well as the completion of the amortization of previously approved costs such as downscaling. Board adjustments resulted in decreases from the requested revenue requirements of \$1.6 million for 1987 and of \$2.0 million for 1988.

The requested and approved revenue requirements are summarized as follows:

	Requested	Approved
	(\$million)	
1986	—	82.0
1987	78.3	76.7
1988	74.5	72.5

Operating Costs

Both the Board and intervenors were concerned with the accuracy of TQM's estimates for various operating expenses, as well as their allocation to the proper operating period. After consideration of the evidence, the Board reduced operating costs by \$0.5 million or 7.18 percent for 1987 and \$0.6 million or 7.34 percent for 1988 to adjust these estimates.

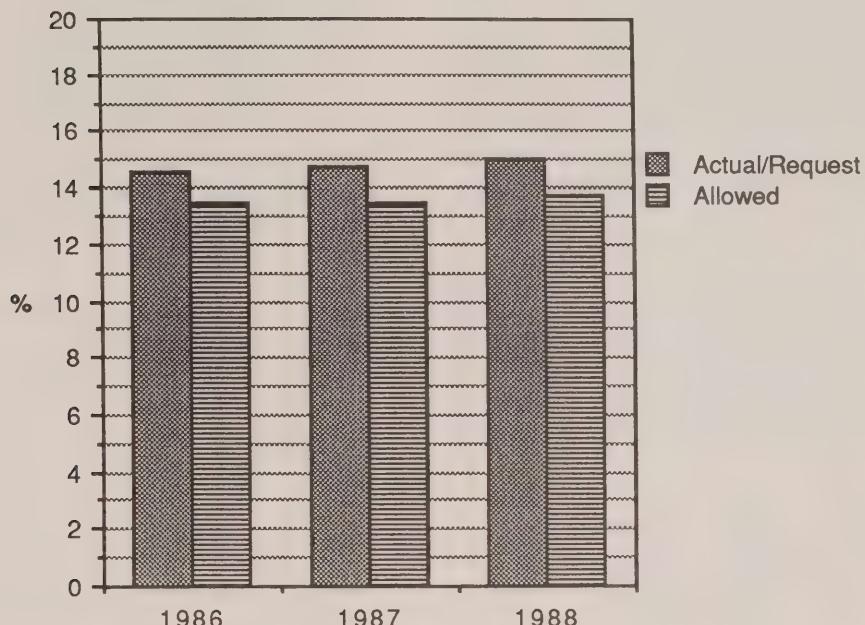
Capital Structure and Return on Equity

TQM asked the Board to increase the equity component of the capital structure from 25 percent to averages of 26.70 percent for 1987 and 28 percent for 1988. The Board denied these requests.

The Company requested that the rate of return on equity be increased from the previously approved level of 13.50 percent for 1986 to 14.75 percent for 1987 and 15 percent for 1988. However, the Board approved rates of 13.50 percent for 1987 and 13.75 percent for 1988.

The Board's adjustments to the overall rate of return reduced the requested overall revenue requirement by \$1.0 million for 1987 and by \$1.4 million for 1988.

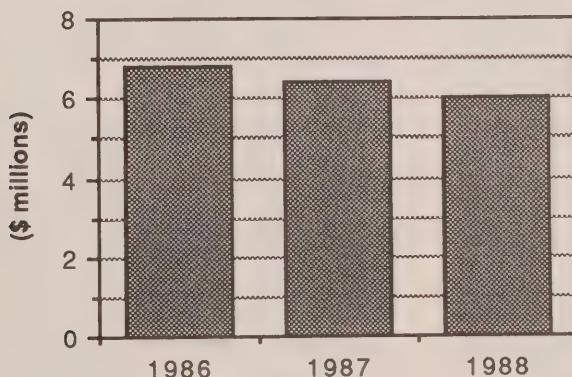
Return on Equity



Toll

The Board's adjustments to the revenue requirement reduced TQM's requested monthly toll by \$0.1 million for 1987 to \$6.4 million, and by \$0.2 million to \$6.0 million for 1988. The approved monthly toll for 1986 had been \$6.8 million.

Monthly Toll 1986-1988



Chapter 1

Application

1.1 Background

Trans Québec & Maritimes Pipeline Inc. (TQM, the Company), as mandatory for a partnership consisting of TransCanada PipeLines Limited (TransCanada) and NOVA Corporation of Alberta (NOVA), operates a pipeline for the transmission of natural gas. The pipeline extends from the point of interconnection with the TransCanada system at St. Lazare, Quebec to a point just west of Québec City, a distance of approximately 298 kilometres.

Natural gas is transmitted by TQM for TransCanada, although not all such gas is owned by TransCanada. Some of the gas owned by TransCanada is sold to TQM at the points of interconnection between TQM and the facilities of Gaz Métropolitain, inc. (GMi), a Quebec distributor. TQM immediately sells this gas to the distributor at the same points. The balance of the gas owned by TransCanada is sold directly to GMi at the distributor's points of interconnection with TQM. The remainder of the gas transmitted by TQM is owned by GMi.

TransCanada is charged the entire toll determined by the National Energy Board (the Board, NEB) to be just and reasonable in respect of transmission services rendered by TQM. Charges to TransCanada by TQM are, upon approval by the Board, included in TransCanada's cost of service as a component of "Transmission by Others". Thus, TQM's toll becomes an integral part of the tolls paid by TransCanada's customers.

By Order No. TG-3-86 dated 15 August 1986, the Board ordered TQM to charge a monthly toll of \$6,832,000 for the transportation service provided to TransCanada, commencing 1 October 1986. By Order No. TGI-55-86 dated 19 December 1986, the Board ordered that, effective 1 January 1987, the toll established by and the tariff filed in accordance with Order No. TG-3-86 be an interim toll and an interim tariff. Effective 1 August 1987, the Board reduced this interim toll to \$6,502,000 by Order No. AO-1-TGI-55-86.

1.2 Application

By an application dated 17 December 1986, TQM applied under Part IV of the National Energy Board Act (the Act) for orders to be effective 1 January 1987 fixing just and reasonable tolls that TQM might charge for or in respect of the transmission of natural gas through its pipeline facilities and disallowing any existing tolls that would be inconsistent with the tolls so fixed.

TQM proposed that, subject to the identification of any particular issue by intervenors which might be dealt with through a public hearing, the Board deal with the application in a manner similar to that adopted in the proceeding pursuant to Order No. RH-2-86, in which all issues other than rate of return were dealt with by written submission.

By letter dated 20 January 1987, the Board asked TQM to consider amending its application of 17 December 1986 to include both 1987 and 1988 as test years. By letter dated 17 February 1987, TQM advised the Board that it would file a revised application to cover both of these test years.

On 6 April 1987, TQM filed a substitute application that requested approval for tolls based on the 1987 and 1988 test years, using the calendar year 1986 as a base year. The Company revised this application on 30 April, 1 September and 28 September 1987.

TQM proposed tolls that conformed with the fixed-toll method of regulation set by the Board in the Company's first toll case pursuant to Order No. TG-2-83 and reaffirmed by orders arising out of subsequent toll cases.

In recognition of the Board statement in the August 1986 TQM Reasons for Decision that, "Unless circumstances change, the Board approves the existing depreciation rates of the Company until the end of the 1988 operating year", TQM applied for approval of the existing depreciation rates for each of the 1987 and 1988 test years.

TQM requested that expenses related to a Quebec government reassessment for stated unpaid sales taxes be recovered through amortization during the 1987 test year, and that a return be calculated on the monthly unamortized balance.

By Order No. XG-3-87, as amended, the Board authorized TQM to construct facilities that would enable the Company to provide temporary storage service to GMi by storing that company's natural gas in TQM's pipeline during off-peak periods. For such service, TQM would charge a toll based upon the actual cost of the facilities and the actual volumes stored. TQM proposed to reflect such revenue in the calculation of the pipeline toll by deducting from the pipeline's cost of service the revenue expected to be received in the test years. The amount of this revenue would be based on the estimated cost of the facilities and the estimated storage volumes. TQM requested a deferral account in which to record the monthly variances between the amount charged to GMi and the amount used to calculate TQM's pipeline toll, along with carrying charges at the rate of return on rate base. These amounts would be brought forward for consideration by the Board in TQM's next toll application.

TQM proposed that the deferral account granted by the Board under paragraph 3.3.1 of the August 1986 TQM Reasons for Decision, to recognize the

volatility of short-term interest rates and the inherent difficulty in forecasting such rates, be continued for the 1987 and 1988 test years.

TQM proposed that the computation of interest on any refund or recovery pursuant to Section 52.2 of the Act recognize the fact that the toll for a given month is not received by the Company until the 20th day of the following month.

TQM proposed that the common equity component of its approved capital structure be permitted to increase gradually through the 1987 test year to a level of 28 percent at 31 December 1987 and to remain at that level through the 1988 test year.

TQM applied for rates of return on equity of 14.75 percent for the 1987 test year and 15 percent for the 1988 test year.

1.3 Board Procedure

By Order No. RH-4-87 dated 12 May 1987, the Board decided to hold an oral hearing on rate of return issues, to deal with all other issues by written submission and to conclude the hearing with oral argument and reply on all issues.

The hearing commenced in Ottawa on 28 September 1987 and concluded on 1 October 1987.

Chapter 2

Revenue Requirement

TQM requested approval of revenue requirements of \$78,265,000 for 1987 and \$74,466,000 for 1988. The authorized revenue requirement for 1986 was \$81,986,000. The decrease of \$3,721,000 in 1987 and the further decrease of \$3,799,000 in 1988 result primarily from a decrease in return caused by the reduction of rate base, as well as the completion of amortization of previously approved costs such as downscaling.

Summaries of the approved revenue requirements for the test years ending 31 December 1987 and 31 December 1988, together with the Board's adjustments, are shown in Tables 2-1 and 2-2, respectively. Details of the Board's adjustments to the revenue requirements for the test years are provided in Chapters 3 to 6.

Table 2-1

**Revenue Requirement for the
1987 Test Year**
(\$000)

	Application ¹	NEB Adjustments	Authorized by NEB
Operating Costs			
Operating and Maintenance	7,038	(506)	6,532
Municipal and Other Taxes	1,948	(29)	1,919
Depreciation and Amortization	<u>16,715</u>	—	<u>16,715</u>
Return on Rate Base	25,701	(535)	25,166
Total Revenue Requirement	<u>78,265</u>	<u>(1,564)</u>	<u>76,701</u>

1 On 28 September 1987, TQM filed Exhibit B-26 updating its application to reflect various changes.

Table 2-2

**Revenue Requirement for the
1988 Test Year**
(\$000)

	Application ¹	NEB Adjustments	Authorized by NEB
Operating Costs			
Operating and Maintenance	7,479	(549)	6,930
Municipal and Other Taxes	2,003	(63)	1,940
Depreciation and Amortization	<u>13,434</u>	—	<u>13,434</u>
Return on Rate Base	22,916	(612)	22,304
Total Revenue Requirement	<u>51,629</u>	<u>(1,398)</u>	<u>50,231</u>
Storage Revenue	74,545	(2,010)	72,535
Net Revenue Requirement	<u>(79)</u>	—	<u>(79)</u>
	<u>74,466</u>	<u>(2,010)</u>	<u>72,456</u>

1 On 28 September 1987, TQM filed Exhibit B-26 updating its application to reflect various changes.

Chapter 3

Rate Base

The Board's adjustments to rate base for the 1987 and 1988 test years are summarized in Tables 3-1 and 3-2, respectively. The details of the adjustments are explained in the succeeding sections of the chapter.

3.1 Gross Plant

TQM forecast its average gross gas plant in service for the test year ending 31 December 1987 to be \$471,989,000, and for the test year ending 31 December 1988 to be \$472,813,000.

Decision

The Board has reviewed the projected plant additions for the 1987 and 1988 test years of \$810,000 and \$591,000, respectively, and finds them reasonable for inclusion in rate base for those test years.

3.2 Working Capital

TQM calculated its working capital in accordance with the methodology previously approved by the Board. The 1987 test-year working capital was projected to be \$2,484,000 and the 1988 test-year working capital was projected to be \$2,179,000.

Decision

The Board has reviewed the Company's methodology for calculating working capital and finds it to be acceptable.

3.2.1 Cash Working Capital

The adjustments to cash working capital shown in Tables 3-3 and 3-4 result from the Board's adjustments of TQM's operating and maintenance (O&M) expenses, as detailed in Chapter 6.

Table 3-1

Rate Base for the
1987 Test Year
(\$000)

	Application ¹	NEB Adjustments	Authorized by NEB
Gas Plant in Service			
Gross Plant	471,989	—	471,989
Accumulated Depreciation	(65,738)	—	(65,738)
Net Plant	406,251	—	406,251
Working Capital	2,484	(42)	2,442
Tax Benefit on			
Sponsors' Development Costs	(13,816)	—	(13,816)
Unamortized Debt Issuance Costs	—	2,466 ²	2,466
Total Rate Base	394,919	2,424	397,343

1 On 28 September 1987, TQM filed Exhibit B-26 updating its application to reflect various changes.

2 See Section 5.2.1 and Exhibit B-20, Schedule 42.1, Page 16 of 26.

Table 3-2

**Rate Base for the
1988 Test Year
(\$000)**

	Application¹	NEB Adjustments	Authorized by NEB
Gas Plant in Service			
Gross Plant	472,813	—	472,813
Accumulated Depreciation	(80,303)	—	(80,303)
Net Plant	392,510	—	392,510
Working Capital	2,179	(46)	2,133
Tax Benefit on			
Sponsors' Development Costs	(13,381)	—	(13,381)
Unamortized Debt Issuance Costs	—	1,890 ²	1,890
Total Rate Base	<u>381,308</u>	<u>1,844</u>	<u>383,152</u>

1 On 28 September 1987, TQM filed Exhibit B-26 updating its application to reflect various changes.

2 See Section 5.2.1 and Exhibit B-20, Schedule 42.1, Page 16 of 26.

Table 3-3

**Working Capital for the
1987 Test Year
(\$000)**

	Application¹	NEB Adjustments	Authorized by NEB
Operating and Maintenance			
Expenses	7,038	(506)	6,532
Gas Used in Operations	(4)	—	(4)
Net Transmission O&M	<u>7,034</u>	<u>(506)</u>	<u>6,528</u>
Cash Working Capital (1/12th O&M)	586	(42)	544
Materials and Supplies	348	—	348
Transmission Line Pack	613	—	613
Prepayments and Deposits	563	—	563
Downscaling	340	—	340
Deferred Sales Tax Expense	<u>34</u>	<u>—</u>	<u>34</u>
Total Working Capital	<u>2,484</u>	<u>(42)</u>	<u>2,442</u>

1 On 28 September 1987, TQM filed Exhibit B-26 updating its application to reflect various changes.

Table 3-4

Working Capital for the
1988 Test Year
(\$000)

	Application ¹	NEB Adjustments	Authorized by NEB
Operating and Maintenance Expenses	7,479	(549)	6,930
Gas Used in Operations	(4)	—	(4)
Net Transmission O&M	<u>7,475</u>	<u>(549)</u>	<u>6,926</u>
Cash Working Capital (1/12th O&M)	623	(46)	577
Materials and Supplies	348	—	348
Transmission Line Pack	613	—	613
Prepayments and Deposits	<u>595</u>	<u>—</u>	<u>595</u>
Total Working Capital	<u>2,179</u>	<u>(46)</u>	<u>2,133</u>

1 On 28 September 1987, TQM filed Exhibit B-26 updating its application to reflect various changes.

3.2.2 *Unamortized Deferred Sales Tax Expense*

TQM applied to recover in its 1987 cost of service \$69,957.60 that had been expended to appeal an assessment for stated unpaid provincial sales tax, to include the average unamortized balance of \$34,000 in the working capital component of rate base and to earn a return thereon at the rate of return on rate base. The Board had approved the deferral of these expenses by a letter to the Company dated 13 August 1984.

The Company stated that these costs were incurred for the benefit of all tollpayers, and the successful resolution confirmed that they had been prudently incurred.

Decision

The Board has reviewed the Company's request and finds reasonable the recovery of the sales tax appeal expense in the 1987 cost of service and the inclusion of the average unamortized balance in the determination of the 1987 rate base.

Chapter 4

Depreciation and Amortization

4.1 Depreciation Rates

The Company requested approval of the existing depreciation rates for the 1987 and 1988 test years. The Board had approved these rates in its August 1986 TQM Reasons for Decision. In that decision, the Board also directed that, unless circumstances changed, TQM was to file a depreciation study by 30 June 1989.

Decision

The Board has reviewed and finds reasonable the Company's requested depreciation rates for use in the 1987 and 1988 test years. Accordingly, the Board approves the Company's estimates of depreciation and amortization expenses. These expenses are summarized in Table 4-1.

Table 4-1

**Depreciation and Amortization
(\$000)**

	1987	1988
Depreciation and Amortization	15,695	13,434
Downscaling Costs	682	—
Hearing Costs	268	—
Deferred Sales Tax ¹	70	—
	16,715	13,434

¹ See Section 3.2.2.

4.2 St. Maurice Storage Facilities

TQM and GMi have entered into an agreement under which TQM would use part of its pipeline to store some of GMi's natural gas.

TQM proposed a deferral account to record the monthly variance between the amount charged to GMi, which would be based on the actual cost to modify the pipeline to be used as a storage facility and the actual storage volumes, and the estimated amount reflected in the calculation of the pipeline toll, with carrying charges on the monthly balance at the rate of return on rate base. Any balance in the deferral account would be brought forward for consideration by the Board at TQM's next toll hearing.

The storage facilities will require additional yard piping which will connect TQM's pipeline to the discharge side of the GMi compressor located at St. Maurice. This will enable TQM to render temporary storage service to GMi by storing gas in TQM's pipeline during off-peak periods. GMi will in turn be able to maintain service to its interruptible customers during periods of peak demand; therefore, this service will allow GMi to increase gas sales within its market without increasing the maximum daily requirement on the TQM system, thereby also increasing TQM's operating load factor.

The transportation and storage contract between TQM and GMi provides for a commodity rate of 88.25 cents per thousand cubic metres which is equal to TransCanada's commodity rate for storage transportation service and its contract demand service diversion charge, and a storage fee to be calculated on the basis of the cost of the facilities depreciated over the term of the contract and a return on the undepreciated balance at a rate equal to the rate of return on rate base. The storage fee does not provide for the collection of O&M expenses as no additional expenses have been identified for the provision of this service.

The storage contract is for a period of eight years, but TQM expects that the facilities will be utilized

beyond the initial term of the contract as the GMi storage contract could be extended or the facilities could be utilized in the normal operation of the pipeline.

TQM included the cost of the required facilities in plant in service and proposed to depreciate them at the Board-approved depreciation rates because the useful life of these facilities is not limited by the existing storage contract.

Decision

The Board has considered TQM's proposal for a deferral account, the methodology for calculating the toll and the rate base treatment for the facilities required for the provision of this service. The Board finds the Company's request to be reasonable and therefore accepts TQM's proposal.

Chapter 5

Cost of Capital

In its revised application, TQM applied for rates of return on rate base of 13.31 percent and 13.54 percent for the test years 1987 and 1988, respectively. These rates compare to the currently approved overall rate of return of 12.94 percent.

The applied-for capital structures for 1987 and 1988, and corresponding individual cost rates and overall requested rates of return are shown in Tables 5-1 and 5-2, respectively, and discussed in detail in succeeding sections of this chapter.

5.1 Capital Structure

5.1.1 Common Equity Ratio

In its application, TQM proposed that the common equity component of its approved capital structure be allowed to gradually increase to a level of 28 percent as at 31 December 1987, and then remain at that level throughout 1988. This request resulted in applied-for capital structures of 73.30 percent debt and 26.70 percent equity for the 1987 test year and 72 percent debt and 28 percent

Table 5-1

**Applied-For Average
Capital Structure and Rates
of Return for the 1987 Test Year**

Capital Structure (%)	Cost Rate (%)	Cost Component (%)
Debt	73.30	12.78
Equity	<u>26.70</u>	<u>14.75</u>
	<u>100.00</u>	<u>13.31</u>

Table 5-2

**Applied-For Average
Capital Structure and Rates
of Return for the 1988 Test Year**

Capital Structure (%)	Cost Rate (%)	Cost Component (%)
Debt	72.00	12.97
Equity	<u>28.00</u>	<u>15.00</u>
	<u>100.00</u>	<u>13.54</u>

equity for 1988. These ratios are based on a forecast of the actual capital structures of the Company, a departure from the currently approved practice of using a deemed capital structure.

It was noted during the proceedings that it is management's goal to gradually increase the common equity ratio to a level of 30 to 35 percent. In this vein, the Company stated during cross-examination that if the actual equity ratio were to reach 30 percent by the Company's next toll hearing, it is likely that it would request an increase in the equity ratio at that time if the shareholders felt that an increase was important.

In making its request, TQM made reference to its need to re-finance a portion of its long-term debt in 1990 and the possibility of debt re-financing in 1989. TQM was of the view that the requested alterations to the capital structures were required (i) to permit the Company to raise the required long-term debt at the most favourable terms and at the lowest rate, (ii) to reflect the Company's prospective business risks and (iii) to obtain a proper balancing of its capital structure more consistent with those of other investor-owned public utilities in Canada.

In argument, the Company stated that the evidence during the hearing indicated that the longer-run business risks of TQM are similar in magnitude to those of TransCanada, whose currently approved equity ratio is 30 percent. However, TQM's expert witness took the position that the Company's request for an increased equity ratio was not being tied to any increase in business risk, but rather the need to re-finance TQM's long-term debt. She suggested that if the Company continued to increase its equity ratio, its credit rating could improve to the "A" level, resulting in a reduction in the cost of debt of some 15 to 25 basis points.

Witnesses representing the Canadian Petroleum Association (CPA) and the Minister of Energy for Ontario (Ontario) took the position that the equity ratio should be maintained at its currently approved level of 25 percent. Both witnesses supported the continued use of a deemed capital structure.

CPA's witness believed that TQM's business risks had decreased since the time of the Company's last toll hearing. He pointed to the improved position of GMi in the Québec market

and the Board's recent decision to continue rolling-in TQM's costs into TransCanada's cost of service as being factors that have served to somewhat reduce TQM's business risk level. He believed that a common equity ratio range of 25 to 30 percent was not unreasonable given TQM's business risks and the equity levels of other utilities; in this case, however, he viewed as appropriate the approach of maintaining the equity ratio at its currently approved level of 25 percent and adjusting his rate of return on equity recommendations upwards by 25 basis points for considerations relating to the risk of TQM as compared to TransCanada. In deciding to adjust his recommended rate of return on equity this year by 25 basis points as opposed to the 50 basis point increment he had incorporated in last year's analysis, the witness took into account, among other things, his belief that the Company's business risks were currently somewhat lower.

CPA's witness believed that there is no concern in the capital markets about TQM's 25 percent common equity ratio, concluding that capital market participants are not anxious with respect to the interest coverage and repayment prospects of the Company's debt. He also indicated that he was reluctant to increase the equity ratio at this time because TQM will, at some point in time, be in a taxable position. The result of such an increase would be to add a substantial cost to the transportation of gas on the TQM system.

Ontario's witness stated that TQM's business risk had essentially remained unchanged from the time of last year's decision. Further, he viewed the existing capital structure as being the most economically efficient one for TQM. In his opinion, the test in this matter is not whether the equity ratio is at the low end of the reasonable range, but rather whether or not the capital structure is financially viable. He believed that the current capital structure of 75 percent debt and 25 percent equity had proven to be financially viable and was highly efficient from the consumers' point of view.

With respect to TQM's interest coverage ratios, Ontario's witness conceded that the Company's 1986 coverage ratio was below those of other regulated companies. However, the witness noted that the Dominion Bond Rating Service had re-affirmed the Company's "BBB" rating in late September 1987. In the context of TQM, he finds such a rating to be acceptable.

Decision

The Board does not believe that there has been a meaningful change in the Company's business risks since the time of the last toll hearing. Further, the Board notes the commitment made by the Company's expert witness that the requested increase in the equity ratio was not being tied, at this time, to any increase in business risk.

The Board recognizes the Company's requirement to re-finance a portion of its long-term debt in 1990 and the possibility of debt re-financing in 1989; however, the Board does not believe that the currently approved equity ratio has adversely affected the Company's financing flexibility, nor is it convinced that the continuance of such a ratio would have a detrimental effect on TQM's re-financing capability in the future. In this regard, the Board finds merit in the assertion that TQM's current capital structure has proven to be financially viable.

Based on the evidence presented, the Board finds that no change is warranted in the common equity ratio at this time. Because this decision results in capital structures for the test years which are different from the actual capital structures which are forecast by the Company, the Board finds it appropriate to continue utilizing a deemed capital structure. Accordingly, the Board approves a deemed equity ratio of 25 percent for toll-making purposes.

5.1.2 Capital Structure for Toll-Making Purposes

As a result of the Board's decision in Section 5.1.1 to continue utilizing a deemed capital structure for toll-making purposes, there are two possible approaches to determining capital structures that could be used in the setting of TQM's tolls.

The first alternative would be a continuance of the current approach, where a deemed capital structure of 75 percent debt and 25 percent equity would be approved, and the cost rates applicable to the debt component of the test-year capital structures would be determined by deriving composite debt cost rates for all of TQM's forecast outstanding debt. As discussed during the proceedings, another deemed capital structure

alternative would be to equate total capitalization to rate base, and include in total capitalization a deemed equity component, actual long-term debt components and a residual unfunded (or prefunded) debt balance¹.

The Company did not support the notion of utilizing a capital structure that equated total capitalization to rate base. In this regard, TQM noted that such an approach would lead to hypothetical numbers; as well, the Company saw this approach as not permitting it the opportunity to recover its actual financing costs.

TQM felt that it was necessary to use a capital structure that reflected the fact that short-term debt was actually being used to finance rate base assets. Because of a declining rate base, the Company stated that it required the flexibility of short-term debt financing and, hence, could not finance its entire capital structure on a long-term basis. Further, the Company noted during cross-examination that, at the time its currently outstanding long-term debt comes due, it may re-finance only a portion of it on a long-term basis and re-finance the remainder on a short-term basis in order to allow this requisite flexibility.

It was noted that utilizing a deemed capital structure for toll-making purposes that equated capitalization to rate base was somewhat similar to the approach used in the case of TransCanada. In this regard, the Company's expert witness noted the different circumstances of the two companies. In the case of TransCanada, she recognized that there is an intention to fund its residual debt balances with long-term debt; there is no such intention in the case of TQM. The Company took the position that if such an approach were used in this case, the residual debt balances should be costed at a short-term rate. TQM's expert witness stated that where there is no intention to fund with long-term debt, a short-term rate should be used.

CPA's witness stated that he preferred to see a capital structure which explicitly incorporated a

¹ Unfunded debt normally represents debt that a company intends to issue on a long-term basis. In a prefunded debt situation, a company would normally have raised a portion of its funded debt in advance of the company's actual cash requirements.

short-term debt component. In voicing his opinion that it was appropriate to view short-term debt as a necessary and integral part of TQM's financing, he stated that he would not exclude short-term debt from the determination of the capital structure and associated cost rates.

Recognizing that in the case of TQM there was no expectation of the Company ultimately financing any residual debt balance on a long-term basis, this witness felt that such balances should be costed at a short-term interest rate.

In stating that he agreed with the continued use of a deemed capital structure, Ontario's witness noted that TQM's actual capitalization was not equal to rate base. He was of the view that the cost of TQM's debt should be determined on a weighted basis (i.e. taking into account both long-term and short-term debt). In this regard, the witness objected to the suggestion that all of the Company's fixed-rate, long-term financing be included in its approved capital structures.

Decision

The Board is of the view that the deemed capital structures used in determining TQM's overall rates of return should be directly related to the Board-approved rate base amounts. Accordingly, the Board believes that it is appropriate, for toll-making purposes, to equate capitalization to the approved rate base levels for the test years.

The Board has decided to identify TQM's Series A, B and C debt issues as being entirely utility-related. This decision, in conjunction with the Board's decision in Section 5.1.1 to approve a deemed equity ratio of 25 percent, results in approved unfunded debt balances of \$13,007,000 in 1987 and \$2,672,000 in 1988. The Board finds that these balances should be costed at short-term interest rates (see Section 5.2.2 for a discussion relating to the approved rates for unfunded debt). By including an unfunded debt balance in the approved capitalizations, and costing these balances using a short-term interest rate, the Board recognizes the special circumstances of TQM and the fact that a portion of its long-term fixed assets is currently financed by short-term debt.

The Board notes that in making this decision there is the possibility of TQM being in a pre-

funded debt situation in future test years. However, the Board also notes that TQM's Series C bonds are to be re-financed in 1990 and that there is the possibility of additional long-term debt re-financing in 1989. In this regard, the Company indicated that, at these times, it may re-finance only a portion of the debt on a long-term basis. When the debt re-financing occurs, the Board expects that the Company will re-finance in a manner that will be consistent with the approved capital structure methodology.

5.2 Cost of Debt

5.2.1 Funded Debt

TQM calculated the cost rates associated with its long-term, fixed-rate debt issues in a manner consistent with past applications. Under the Company's approach, these cost rates were calculated by dividing total financial charges (i.e. interest plus the yearly amortization of debt issuance costs) by what it considered to be the net proceeds outstanding for each issue. TQM then used the outstanding gross proceeds for each issue in determining the relative weights to be given the Company's long-term and short-term debt instruments. To derive an overall cost rate for debt, the Company applied the net proceeds determined long-term cost rates, together with its forecast short-term interest rates, to the gross proceeds determined weightings. The resultant overall cost rate was then applied to the applied-for debt component of the capital structure in arriving at the cost component for debt to be applied to rate base.

Two alternatives to the Company's method of calculating the cost of debt were discussed during the proceedings. The first alternative methodology was also characterized as a net proceeds approach. Under this approach, the cost rate is calculated by dividing total financial charges by the average gross proceeds of debt outstanding (less the average unamortized balance of debt issuance costs). In contrast, the Company took the view that the net proceeds of debt outstanding is calculated by multiplying the outstanding gross proceeds by the original net proceeds percentage of funds received.

The second alternative methodology was characterized as a gross proceeds approach. The cost rate is determined in this case by dividing

total financial charges by the average gross proceeds of debt outstanding. As well, under this approach the average unamortized balance of debt issuance costs is included in rate base. This methodology is essentially the same as the method currently being utilized by TransCanada.

The Company did not see that the use of the gross proceeds of the debt issues to determine the mix of the Company's short-term and long-term debt obligations was in conflict with the manner in which it calculated the cost rates relating to its long-term debt issues. However, a Company witness agreed during cross-examination that if the cost rates determined according to the two alternative formulae were applied against the corresponding gross proceeds and net proceeds amounts (as also defined in the alternative formulae), the Company would indeed recover the full amount of financial charges.

In commenting on the Company's approach, CPA's witness opined that if the Company were using a net proceeds approach to determine the cost rates, it would be more appropriate, for consistency, to use the net proceeds to determine the weighting of the Company's debt. He agreed that if a net proceeds determined cost rate were applied to a gross proceeds amount of debt outstanding, the Company would over-recover its financial charges. This witness did not assess the reasonableness of the two alternative approaches to determining the cost of debt. However, he was concerned with the Company's portrayal of its approach to costing its debt issues. In this regard, he noted that the issuance costs are recovered over the life of the debt issues. It appeared to the witness that the cost rates associated with the Company's long-term debt issues were too high, because they did not reflect the Company's potential for earning a return on the recovered debt issuance costs.

Decision

The Board finds there to be an inconsistency in determining debt cost rates on a net proceeds basis, and the dollar amounts of debt outstanding on a gross proceeds basis. In its view, both the cost rates and dollar amounts should be determined on the same basis (i.e. net or gross proceeds). The Board agrees that, if a net proceeds determined cost rate were applied to a gross proceeds amount

of debt outstanding, a company would over-recover its financial charges.

The Board believes that both the alternative methods of determining the overall cost of funded debt have merit. In this case, the Board has decided to approve a gross proceeds approach. Accordingly, the Board has included in rate base the unamortized balances of debt issuance costs for the 1987 and 1988 test years. These amounts are \$2,466,000 and \$1,890,000, respectively.¹

Consistent with the method used by the Company to determine its rate base, the Board finds it appropriate to determine the funded debt balances included in the approved capitalizations on a 13-point average basis. As a result of its decisions in this case, the Board finds funded debt balances of \$285,000,000 and \$284,692,000, and an associated cost rate of 12.92 percent, to be reasonable for the 1987 and 1988 test years, respectively (see Appendix III for a derivation of the approved funded debt balances and associated cost rate).

5.2.2 *Unfunded Debt*

In its application, TQM asked that forecast prime rates of 9.50 percent for 1987 and 9.75 percent for 1988 be used to cost its expected short-term debt balances, in conjunction with its request for a continuation of the short-term debt deferral account. If the requested deferral account were not granted, TQM requested that cost rates of 10 percent and 10.50 percent be used for 1987 and 1988, respectively, as compensation for the risk of the Company being unable to recover its actual interest costs. Given that the 1987 test year was three-quarters completed, a Company witness suggested that a premium of 50 basis points would be sufficient for the last quarter of 1987.

For 1987, TQM noted that the actual prime rate for the period 1 January to 31 August 1987 was 9.38 percent, and the prime rate as of 1 September 1987 was 10 percent. Assuming a prime rate of 10 percent for the last 4 months of 1987, the Company determined that the average rate for 1987 would be 9.59 percent. In not updating its application for 1987, TQM referenced its request for a

¹ Source: Exhibit B-20, Schedule 42.1, Page 16 of 26.

continuation of the short-term debt deferral account.

For 1988, the Company's expert witness was of the view that an average prime rate of 9.75 percent was a reasonable estimate of the midpoint of the range for the year. With respect to the cost rate that should be approved if the short-term debt deferral account were not continued, she did not feel that a premium of 75 basis points was unreasonable, in light of the 125 basis point swing in the prime rate in 1987.

CPA's witness was of the opinion that the appropriate rate at which to cost TQM's short-term debt for 1987 should reflect the actual costs to date and a rate of 10 percent for the remainder of the year. He also recommended a rate of 10 percent for the whole of 1988. He took the view that, if the short-term debt deferral account were not granted, the Company's request for a 75 basis point premium for 1988 for the risk of possible interest rate fluctuation was totally unreasonable; he suggested a premium of something less than 8 basis points.

Ontario's witness did not make any specific reference as to what he thought the average prime rates would be in 1987 and 1988; however, he noted that the prime rate was 10 percent at the time he appeared before the Board in this proceeding. It was Ontario's position that the approved cost rate for 1987 should reflect actual interest rate levels to date, and some reasonable estimate for the remainder of the year. Ontario argued that TQM's short-term debt for 1988 should be costed at a rate of 10 percent. Given that 10 percent of TQM's outstanding debt is costed at prime minus one-half of one percent, and that the Company's forecast of prime for 1988 was lower than the prime rate prevailing at that point in the proceeding, Ontario was of the view that no further protection was required. The Board notes that the Company assumed in its application that its entire short-term debt financing in 1988 would be at the prime rate.

Decision

As discussed in Section 5.1.2, the Board has decided to cost the approved unfunded debt balances using short-term interest rates, recognizing the Company's specific circumstances.

In deciding on an appropriate cost rate for 1987, the Board has taken into account the fact that this test year is partially completed. The Board has also taken into account the movement in the prime rate since the completion of the hearing. In conjunction with its decision in Section 5.2.3.2, and the recent volatility of interest rate levels, the Board finds a cost rate for unfunded debt of 9.75 percent to be reasonable for 1987.

For 1988, the Board recognizes the difficulties inherent in accurately forecasting short-term interest rates for a prospective test year. However, the Board believes that the requested premium of 75 basis points over the applied-for short-term rate, if the requested deferral account were denied, is excessive. Further, the Board finds that the amount of unfunded debt to be costed at a short-term interest rate is at a reasonably low level in 1988. Having considered the evidence, the Board finds 10 percent to be a reasonable cost rate for 1988.

5.2.3 Short-Term Debt Deferral Account

5.2.3.1 Disposition of 1986 Variance

There was considerable discussion during the proceedings regarding the appropriate treatment of the variance between the actual and approved short-term interest costs for 1986.

By letter dated 15 December 1986, TQM sought Board approval for the reimbursement of approximately \$56,000 to TransCanada as at 31 December 1986. The Board concurred with this reimbursement in mid-January 1987. However, TQM provided detailed information in its quarterly surveillance report dated 17 February 1987 for the calendar year 1986 that showed that the actual amount of financial charges in 1986 was \$693,000 less than the amount approved by the Board in its August 1986 TQM Reasons for Decision. During the proceedings, it was revealed that the portion of this variance between the actual and approved financial charges that related to short-term debt amounted to \$740,000. This variance resulted, to a large extent, from an over-estimation by the Company of its 1986 operating loan balances. TQM noted that if this over-estimation had not occurred, the approved cost rate for debt in 1986 would have been higher than the rate actually allowed.

TQM argued that no additional reimbursement to TransCanada should be made at this time; to do so would amount to retroactive toll-making. In support of its position, TQM pointed out that the deferral account was not intended to capture all variances between the actual cost of its short-term debt and the approved amount, but rather to capture only the variance between the approved and actual short-term interest rates. Further, TQM noted that the amount reimbursed to TransCanada was calculated strictly in accordance with the deferral account approved by the Board in its August 1986 TQM Reasons for Decision and, therefore, represented the appropriate amount of reimbursement.

While not putting forward any evidence on the matter, Ontario argued that the full amount of the variance in short-term interest costs should be refunded to TransCanada.

Decision

Having reviewed all of the evidence, the Board finds that no action is required on this issue.

5.2.3.2 Continued Appropriateness of Short-Term Debt Deferral Account

The discussion in this section relates to the continued appropriateness of the short-term debt deferral account in the context of the capital structure approved for toll-making purposes (as described in Section 5.1.2).

TQM took the position that it would require a short-term debt deferral account if the capital structure included unfunded debt balances, stating that the Company would still require short-term debt to finance a portion of its rate base. In this regard, a Company witness pointed to the fact that its short-term debt component is exposed to fluctuations in interest rates. This witness was not aware of any other company regulated by the Board which had their short-term debt costs protected by a deferral account.

In his evidence, CPA's witness supported the Company's request for a continuation of the deferral account. However, it was pointed out during the proceedings that, if the proposal of utilizing a capitalization for toll-making purposes that included unfunded debt balances

were adopted, the entire amounts of the Company's Series A, B and C bonds would be reflected in the approved capital structures. As a result, TQM would be getting the benefit of having its higher-cost funded debt forming a larger portion of its approved capital structure. In this situation, the witness believed that a meaningful benefit would be conferred on TQM and that the requested deferral account would not be required.

While recognizing that there were risks associated with costing unfunded debt balances, Ontario's witness was of the view that all companies have to adopt some risk relating to the possibility of fluctuations in short-term interest rates. He preferred that deferral accounts be avoided, and that a single rate be used to cost unfunded debt balances, as has been done in other cases before the Board. Ontario took the position in argument that it did not advocate the use of a deferral account for short-term interest costs because of the general difficulties created by such accounts, citing the problems created with respect to the disposition of the 1986 short-term debt variance, as an example.

Decision

Having regard to its decisions in Section 5.1.2, the Board finds that the requested short-term debt deferral account is no longer required during the test years. In reaching this decision, the Board believes that TQM is receiving a meaningful benefit from having its entire amount of long-term debt reflected in its approved capital structures. Further, the Board took note of the fact that other companies which it regulates on the basis of capital structures similar to that described in Section 5.1.2 do not have deferral accounts to protect them from the possibility of interest rate fluctuations.

5.3 Rate of Return on Equity

TQM applied for rates of return on equity of 14.75 percent for 1987 and 15 percent for 1988. In making these requests, the Company was applying for an increase from the currently approved rate of 13.50 percent. In support of the applied-for rates, TQM relied on the advice of its expert witness, who estimated the cost of equity capital by reference to the discounted cash flow (DCF) and equity risk premium techniques.

CPA's expert witness recommended a rate of return on equity of 12.75 to 13 percent for 1987, and 13 percent for 1988. Like the Company's witness, CPA's expert relied on the results emanating from his application of the DCF and equity risk premium cost estimation techniques.

Ontario also presented evidence as to the appropriate rate of return on equity for TQM. Its witness recommended a rate in the range of 12.75 to 13 percent for 1987, and 13 to 13.25 percent for 1988. This witness utilized the same two cost estimation techniques as did the other expert witnesses, as well as the comparable earnings approach.

With respect to her equity risk premium analysis, TQM's witness determined that the basic cost of equity capital was in the range of 13.75 to 14 percent. In reaching this conclusion, the witness utilized forecast long-term Government of Canada bond (long-Canada) yields of 9.75 percent for 1987, and 9.75 to 10 percent for 1988, and a risk premium estimate of 4 percentage points. The witness then made a 10 percent adjustment for flotation costs, resulting in a cost of equity range of 15.125 to 15.40 percent. During cross-examination, reference was made to the fact that the witness' figure for the basic cost of equity capital in this proceeding, as determined by reference to the risk premium approach, was similar to that determined by the Company's witness in last year's proceeding. The witness replied that this similarity did not mean that the overall cost of equity had remained unchanged, because the basic results for the two periods were not directly comparable. In this regard, she noted that in her risk premium analysis this year she had not made an explicit adjustment to her results for the incremental risk of TQM relative to better-grade Canadian utilities.

In her DCF analysis, TQM's witness concluded that the basic cost of equity capital was 13.20 percent, based primarily on an examination of the costs of equity for the companies in her industrial sample. TQM's witness indicated that she viewed TQM's financial risks, even at the proposed common equity ratios, as exceeding those of higher-grade Canadian utilities. Accordingly, her basic cost of equity estimate of 13.20 percent included a 50 basis point adjustment for TQM's higher risks relative to her sample companies. Making a 10 percent adjustment for flotation costs, as she had done in the risk premium

approach, resulted in a final cost of 14.50 percent. It was noted during cross-examination that the Company witness' figure for the basic cost of equity capital as determined by the DCF approach, prior to adjusting for risk considerations, was some 50 basis points lower in this proceeding than in last year's.

In reaching her final rate of return recommendations, this witness indicated that she gave the results of the two cost estimation techniques approximately equal weight. Further, she concluded that, if the equity ratio were left at its currently approved level of 25 percent, her final rate of return on equity recommendation would increase by approximately 20 basis points.

TQM noted in argument that the recommendations of CPA's and Ontario's witnesses suggested that the currently approved rate of return on equity should be reduced and that these recommendations were lower than, or the same as, those recommended at the last TQM toll hearing. In this vein, the Board notes that the recommendations of the Company's expert witness were also lower for the 1987 and 1988 test years than they were for 1986.

In his DCF analysis, CPA's witness concluded that the investors' required rate of return was currently no more than 12.25 percent. This rate included a premium of 25 basis points, reflecting his risk assessment of TQM relative to TransCanada. In his risk premium analysis, this witness utilized a long-Canada forecast of 9.75 percent and a risk premium of 2.75 percentage points in determining his preliminary cost of equity capital of 12.50 percent. In concluding that a risk premium of 2.75 percentage points was reasonable for TQM, the witness used a risk premium of 5 percentage points for the entire market, adjusted for a beta value of .55 in order to take into account the lower risk of TQM relative to the market as a whole. He concluded that rates of return on equity for 1987 and 1988 of 12.75 to 13 percent and 13 percent, respectively, would be fair. In making these recommendations, the witness took into account, among other things, his test results, the recent behaviour of interest rates and his recommendation that TQM's equity ratio be maintained at its currently approved level.

It was noted during cross-examination that this witness' rate of return recommendations for

TQM had decreased for the test years relative to last year, despite the fact that the forecast long-Canada rates assumed in the two cases were similar. He stated that if the long-Canada rate were the only factor to consider in establishing a fair rate of return on equity, then there would be no rationale for recommending a lower rate for the test years. In this regard, the witness stated that the premium required by investors in long-term bonds can increase in the absence of any increase in the requirement of equity investors because of the different risk exposures of the two types of securities. CPA's witness pointed out that his DCF analysis in this case provided evidence that the cost of equity capital had decreased despite the fact that somewhat higher interest rates were being forecast for the 1987 and 1988 test years relative to 1986. The Board notes that while this witness' basic cost of equity, as per his DCF analysis, had decreased by 75 basis points this year (prior to adjusting for risk considerations), his basic risk premium results were identical in the two proceedings.

In argument, CPA recognized that interest rates had changed since the time of the Company's last toll hearing; however, it was CPA's position that the change had not been sufficient to warrant a dramatic change in the approved rate of return. CPA pointed out that the witnesses had taken into account the revised interest rate forecasts in arriving at their respective rate of return recommendations and that, in particular, the recommendations made by the expert witnesses representing TQM and CPA were lower in this proceeding than they were at the time of the Company's last toll hearing.

Ontario's witness relied primarily on the results emanating from his equity risk premium and DCF analyses. He gave little weight to his comparable earnings results based on his belief that such results had been highly distorted in the recent past because of the impact of inflation.

In his original testimony, the witness' risk premium result was a range of 12.20 to 12.70 percent, comprised of a then current 15-year long-Canada yield of 9.35 percent and a risk premium of 2.85 to 3.35 percentage points. At the time of his appearance before the Board, the long-Canada rate had increased to a level of 10.75 percent. He concluded that the possible impact of this rate increase on his risk premium results would be a 70 basis point increase. In his

application of the DCF test, this witness utilized a sample of utilities. The results of this test originally led him to conclude that the basic cost of equity capital for TQM was in the range of 11.30 to 11.97 percent. As a result of changes that took place between the preparation of his evidence and his appearance at the hearing, the witness concluded that his DCF results should also be increased, by a maximum of 30 basis points.

With respect to an adjustment for market pressure, the witness added 60 basis points to his base results to allow TQM to maintain a notional market-to-book ratio of 1.10. In attempting to ensure that such a notional market-to-book ratio for TQM would result, the witness noted that he had increased his market pressure allowance by 10 basis points as compared to last year. He viewed the adjustments made by the Company's witness, which were in the range of 130 to 140 basis points, as being compensation which was clearly over and above the required cost of capital.

The witness concluded that his original rate of return on equity recommendation of 12.50 to 12.75 percent for both test years should be increased by 25 basis points for 1987 and 50 basis points for 1988. For 1987, the witness recognized that the year was already three-quarters completed and that the changed cost of equity capital would apply, at most, to one-half of the year. For 1988, his increase of 50 basis points reflected the full impact of his revised DCF and risk premium results, namely adjustments of 30 to 70 basis points, respectively.

In argument, Ontario noted that all of the witnesses, after updating their respective testimonies, were recommending rate of return on equity levels that were either at or below the levels they were recommending at the Company's last toll hearing. Ontario saw this as being clear evidence that all of the expert witnesses, despite the recent increases in long-term interest rates, were in agreement that the cost of equity capital had not increased.

Decision

All of the expert witnesses based their final rate of return on equity recommendations primarily on an analysis of the results of their respective DCF and equity risk premium tests. With respect to the DCF approach, the Board believes that the results obtained by

Ontario's witness suffer, to some extent, from the inherent circularity brought about by applying this approach to a sample of utilities. Only the witnesses representing TQM and CPA presented DCF evidence for samples of industrial companies. While the dividend yield components of their respective results were quite similar, the witnesses had differing opinions as to the appropriate growth estimates to utilize (10.50 percent for TQM's witness and an implicit growth rate of 9.60 percent for CPA's witness). The Board was not persuaded that one growth estimate was to be preferred over the other.

Another area of disagreement centred on the need for, and magnitude of, an incremental risk adjustment for TQM. The Board believes that, to the extent such an adjustment is required, the amount of the adjustment would be small. The Board is of the view that, while the Company faces somewhat greater financial risks than certain other regulated companies, TQM's business risks are relatively low when compared to other established gas transmission companies.

As in past proceedings, the difference between the basic equity risk premium results for TQM's and CPA's witnesses was essentially brought about by the differing risk assessments of TQM relative to the entire market. While the Board recognizes that the amount of the required adjustment cannot be precisely determined and calls for the exercise of judgment, it is of the opinion that the appropriate beta value is somewhat above the level suggested by CPA's witness.

The Board notes that, in reaching their final recommendations, all of the witnesses took into account not only the increase in forecast interest rates for the test years as compared to 1986, but also the changes in rates that have taken place since early in 1987. Having done so, the witnesses' recommendations for the 1987 and 1988 test years were still at or below their respective recommendations for TQM at last year's toll proceeding. In this regard, the Board recognizes that the risk premium required by investors in long-term bonds has increased, apparently without a concomitant increased requirement by equity investors.

Based on an examination of the various test results for 1987, the Board would normally be of the view that a reduction in the currently approved rate of return on equity was warranted. However, the Board recognizes that the long-Canada forecasts for 1987 are somewhat higher than they were in 1986. The Board also recognizes that, because the 1987 test year is more than three-quarters completed, there is less uncertainty as to the average level of these rates for 1987. Based on the evidence, the Board finds that no change in the allowed rate of return on equity is required for 1987.

With respect to 1988, the Board notes that all of the witnesses have taken the recent movement of interest rates into account in determining that a different rate is warranted for 1988 as compared to 1987. Because of the recent volatility in interest rates, the Board is of the view that there is considerable uncertainty as to whether the projected interest rate levels for 1988 will, in fact, prevail on average for that test year.

The Board finds that rates of return on equity of 13.50 percent for 1987 and 13.75 percent for 1988 are fair and reasonable.

5.4 Rate of Return on Rate Base

Based on its findings in this case, the Board approves rates of return on rate base of 12.97 percent and 13.11 percent for the 1987 and 1988 test years, respectively. The approved capital structures and overall rates of return are summarized in Tables 5-3 and 5-4.

5.5 Income Taxes

5.5.1 *Adjustments to Prior Years' Income Tax Losses Carried Forward*

In its annual income tax filing with the Board for 1986, TQM reported a taxable income for toll-making purposes of \$13,690,000. After its review, the Board revised this amount to \$13,684,000 to reflect a calculation error in the net income reported by the Company (Table 5-5). Also included with the Company's filing was a revision to the 1985 year to account for a Capital Cost Allowance adjustment. Originally,

Table 5-3

Approved Deemed Average
Capital Structure and Rates
of Return for the 1987 Test Year

	Amount (\$000)	Capital Structure (%)	Cost Rate (%)	Cost Component (%)
Debt - Funded	285,000	71.73	12.92	9.27
- Unfunded	<u>13,007</u>	<u>3.27</u>	9.75	<u>.32</u>
Total Debt Capital	298,007	75.00		9.59
Equity	<u>99,336</u>	<u>25.00</u>	13.50	<u>3.38</u>
Total Capitalization	<u>397,343¹</u>	<u>100.00</u>		
Rate of Return on Rate Base				<u>12.97</u>

1 Capitalization set equal to rate base (see Section 5.1.2).

Table 5-4

Approved Deemed Average
Capital Structure and Rates
of Return for the 1988 Test Year

	Amount (\$000)	Capital Structure (%)	Cost Rate (%)	Cost Component (%)
Debt - Funded	284,692	74.30	12.92	9.60
- Unfunded	<u>2,672</u>	<u>.70</u>	10.00	<u>.07</u>
Total Debt Capital	287,364	75.00		9.67
Equity	<u>95,788</u>	<u>25.00</u>	13.75	<u>3.44</u>
Total Capitalization	<u>383.152¹</u>	<u>100.00</u>		
Rate of Return on Rate Base				<u>13.11</u>

1 Capitalization set equal to rate base (see Section 5.1.2).

100 percent of Capital Cost Allowance had been claimed for Class 12 assets while only 50 percent was allowable. This revision increased TQM's 1985 taxable income for toll-making purposes by \$4,000 to \$13,517,000. For the 1987/88 test years no income tax provision is projected because of TQM's continuing available income tax losses (Table 5-6). Table 5-7 shows the income tax losses that have been utilized and the balances available to be carried forward for application against future net income for toll-making purposes.

Decision

The Board has adjusted the 1985 and 1986 income tax losses carried forward, as shown in Table 5-7.

5.5.2 Reporting Methodology

TQM was asked to justify why it did not use the weighted average cost of equity multiplied by the average test-year rate base to determine its taxable income. TQM noted that its method of determining taxable income was consistent with that used in past years. However, the Company indicated that the method it used, and that suggested by the Board, provided the same end result.

Decision

Having reviewed the methodology used by TQM in its toll application and annual income tax filing to determine income taxes, the Board has decided that it wishes to maintain consistency in the reporting methodologies of the companies it regulates. Accordingly, TQM is directed to use the equity portion of the return on rate base as the utility income after tax in deriving its income tax provision for toll-making purposes in future toll applications and in its annual income tax filing to the Board. This methodology is illustrated in Tables 5-5 and 5-6.

Table 5-5

Approved Utility Income Tax Allowance for 1986 (\$000)

Utility Income After Tax	13,932 ¹
Add: Depreciation	17,141
Amortization	2,322
Less: Inventory Allowance	(3)
Interest AFUDC	(22)
Capital Cost Allowance	(19,686)
Capital Losses Carried Forward	(13,684)
Utility Income After Tax, as Adjusted	—
Utility Income Tax Allowance	—

¹ Weighted average cost of equity multiplied by approved average rate base (3.38% X 412,201).

Table 5-6

Approved Utility Income Tax Allowance for the 1987 and 1988 Test Years (\$000)

	1987	1988
Utility Income After Tax ¹	13,430	13,180
Add: Depreciation	15,695	13,434
Amortization	1,020	—
Less: Interest AFUDC	(7)	(3)
Capital Cost Allowance	(18,439)	(17,301)
Capital Losses Carried Forward	(11,699)	(9,310)
Utility Income After Tax, as Adjusted	—	—
Utility Income Tax Allowance	—	—

¹ Weighted average cost of equity multiplied by approved average rate base (1987: 3.38% X \$397,343; 1988: 3.44% X \$383,152).

Table 5-7

Income Tax Losses Carried Forward For Toll-Making Purposes
1983 - 1988
 (\$000)

	1983	1984	1985	1986	1987	1988
Losses Carried Forward (Opening Balance)	(40,615)	(80,645)	(74,224)	(60,707)	(47,023)	(35,324)
Taxable Income/(Loss)¹	(8,403)	6,421	13,517	13,684	11,699	9,310
Sponsors' Development Costs	<u>(31,627)</u>	—	—	—	—	—
Losses Carried Forward (Closing Balance)	<u>(80,645)</u>	<u>(74,224)</u>	<u>(60,707)</u>	<u>(47,023)</u>	<u>(35,324)</u>	<u>(26,014)</u>

1 Utility income after tax, as adjusted, prior to adjusting for income tax losses carried forward.

Chapter 6

Operating Costs

This chapter reviews the two cost of service components: operating and maintenance expenses, and municipal and other taxes. Summaries of the requested and approved operating and maintenance expenses for the 1987 and 1988 test years, together with Board adjustments, are shown in Tables 6-1 and 6-2, respectively. The adjustments are explained in the succeeding sections of this chapter.

6.1 Operating and Maintenance Expenses

6.1.1 Inflation Escalation Factors

TQM estimated test-year O&M expenses other than salaries, employee benefits, office rental expenses, and insurance expenses by adjusting the base-year amounts using inflation escalation factors of 4 percent for 1987 and 5 percent for 1988. CPA and Ontario contended that the forecast inflation rate for 1988 should be 4.5 percent.

Table 6-1

Operating and Maintenance Expenses for the 1987 Test Year (\$000)

	Application	NEB Adjustments	Authorized by NEB
Salaries	2,566.5	(123.4)	2,443.1
Employee Benefits - Direct	536.6	(21.5)	515.1
Employee Expenses	156.6	(41.0)	115.6
Consultants Expense	325.3	(97.6)	227.7
Communication Costs	238.2	(51.9)	186.3
Legal Expense	100.0	(18.4)	81.6
Regulatory Expenses	395.8	(151.7)	244.1
Other	<u>2,718.9</u>	<u>—</u>	<u>2,718.9</u>
Total	<u>7,037.9</u>	<u>(505.5)</u>	<u>6,532.4</u>

Table 6-2

Operating and Maintenance Expenses for the 1988 Test Year (\$000)

	Application	NEB Adjustments	Authorized by NEB
Salaries	2,728.2	(175.4)	2,552.8
Employee Benefits - Direct	564.4	(25.0)	539.4
Employee Expenses	166.5	(45.1)	121.4
Consultants Expense	296.6	(89.0)	207.6
Communication Costs	243.2	(47.6)	195.6
Regulatory Expenses	431.3	(166.8)	264.5
Other	<u>3,048.4</u>	<u>—</u>	<u>3,048.4</u>
Total	<u>7,478.6</u>	<u>(548.9)</u>	<u>6,929.7</u>

Decision

For the purpose of estimating general adjustments to the O&M expenses, the Board accepts the applied-for 4 percent and 5 percent inflation escalation factors for the 1987 and 1988 test years, respectively.

6.1.2 Salaries and Employee Benefits

6.1.2.1 Salaries Escalation Factors

TQM's 1987 projection of salaries for permanent staff reflected an overall increase of 4.95 percent over the comparable base-year amounts, which were found by TQM's consultant to be competitive at the median of the marketplace. The Company stated that the 4.95 percent increase included a 3.50 percent increase in salary structure, plus 1 percent for merit and the balance for promotional adjustments.

TQM cited the results of a salary survey of 311 Canadian organizations which indicated that the average budget for 1987 salary increases ranged from 4.60 to 5.20 percent. It contended that, excluding the promotional adjustment, the proposed 4.50 percent payroll increase was in line with but on the low side of the forecasted national average increase of 4.70 percent. The Company stated that the proposed increase exceeded those planned for 1987 by companies in the oil and gas sector in western Canada but recognized the reality of the competitive market in Quebec. TQM did not accept Ontario's recommendation that 1987 payroll expense be approved on the basis of actual first-half and forecast second-half expenses. It contended that actual cost data for a part of a year cannot be meaningfully compared to the costs applicable to the whole year.

For 1988, TQM proposed an overall increase of 6.40 percent above the 1987 forecast amount, reflecting a 6 percent general increase plus a provision of 0.40 percent for promotional adjustments. TQM's consultant stated that, in 1988, the Consumer Price Index (CPI) is forecast to increase by 4.50 to 5 percent. This will result in a similar increase in the salaries structure. Actual salaries will increase by an additional 1.50 to 2 percentage points to account for in-range increases. He indicated that the market movement in actual salaries in Quebec exceeded inflation in 1987 and would do so again in 1988,

noting that the growth in the Canadian economy generated by the industrialized regions in southern Ontario and southern Quebec was placing pressure on salary markets. Accordingly, he stated that because organizations design their pay systems to recognize performance of individual employees in competitive markets, this results in salary increases beyond CPI movement.

Ontario asserted that the requested 6.40 percent increase for 1988 was excessive and inflationary, higher than even TQM's 1988 inflation rate projection of 5 percent. Ontario contended that the 1988 salary increase, including the promotion increase, should not exceed the estimated inflation rate, which, according to Ontario, was forecast at 4.50 percent. Ontario questioned TQM's contention that actual salaries will increase above the inflation rate by 1.50 to 2 percentage points to reflect in-range increases. Ontario suggested that TQM was neither increasing its rate base, nor expanding its service area; such a stable business environment would not justify any automatic in-range increases. Ontario noted that, given the recent significant downscaling of staff, TQM was left with a highly experienced staff and little turnover, leading to most staff being at the high end of their salary range. TQM argued against this suggestion by claiming that Ontario had no evidence to support it.

Decision

The Board is not persuaded that salary increases of the applied-for magnitude for the 1987 and 1988 test years are justified.

After considering all information available to it in this respect, the Board is of the view that overall salary increases of 4 percent for 1987 and 4.50 percent for 1988 are reasonable. Accordingly, the Board has reduced the applied-for test-year salaries by \$21,800 for 1987 and \$68,400 for 1988 to reflect these decisions.

6.1.2.2 Number of Permanent Employees

TQM projected a staff complement of 67 permanent employees for each month of the two test years. In support of its staff requirement, TQM provided its organization chart and a description of the duties performed by various members of staff.

The evidence showed that TQM's estimate of permanent salaries did not reflect a vacancy adjustment. TQM contended that a vacancy adjustment is provided for on the basis of historical information for a company with a stable number of employees, and that that situation did not exist at TQM, because, prior to 1986, the Company was in a phase of personnel reduction. However, TQM reported some vacancies during the first half of 1987 as one employee departed in March and another in April. It indicated that one of the vacant positions would be filled in August. Ontario contended that since TQM could effectively operate with fewer employees, the Board should reduce TQM's permanent person-years for both test years.

Decision

The Board's review of TQM's staff requirement finds no compelling reasons to reduce the forecasts of permanent person-years for 1987 and 1988. However, given that the permanent staff complement is forecast to remain stable over the 1987/88 period, it is not unreasonable to expect some vacancies to occur from time to time. Accordingly, the Board is of the view that a vacancy adjustment would be appropriate.

In the absence of historical records, the Board estimates that a vacancy rate adjustment of 2 percent of salaries would be reasonable. The 2 percent rate is in line with the vacancy rate experienced by other pipeline companies. Therefore, the applied-for test-year salaries have been adjusted downwards by \$47,800 for 1987 and \$49,900 for 1988, reflecting the 2 percent vacancy adjustment.

6.1.2.3 Number of Temporary Employees

For both the 1987 and 1988 test years, TQM projected to have an average of five temporary employees, their actual number varying from one in winter to thirteen in the summer months. In the base year, TQM had an average of three temporary employees. TQM stated that one of the thirteen temporary employees was in data processing on a continuing basis, four were in maintenance for varying numbers of months and eight were students hired for the summer months.

The evidence indicated that in the first six months of 1987 TQM had actually employed, on average,

less than two temporary employees (eleven person-months), or approximately two less than projected. TQM reported that this was because of rescheduled maintenance work thereby delaying the hiring of some employees. Ontario recommended that the Board approve an average of three temporary person-years for both test years.

Decision

On the basis of the evidence presented, the Board is not convinced that TQM's test-year requirements for temporary person-years should be any greater than in the base year. Therefore, the Board has decided to allow in the cost of service, for both test years, salaries of three temporary person-years instead of the requested five. The Board's adjustments to test-year salaries reflecting this decision amount to \$35,600 for 1987 and \$37,300 for the 1988 test year.

6.1.2.4 Overtime

TQM projected overtime pay of \$53,400 and \$93,200 in the 1987 and 1988 test years, respectively. The Company stated that the amount of overtime pay was estimated at 3.90 percent of each individual salary eligible for overtime. This factor represented, for the past three years, the overtime pay expressed as a percentage of employee salaries eligible for overtime.

Ontario recommended that, for the 1987 test year, the Board approve overtime as reflected in the first-half actual and second-half forecast salary expense. For the 1988 test year, the amount should be determined on the basis of the rate of inflation.

Decision

The Board is of the view that TQM should minimize the use of overtime. The Board finds no evidence to suggest that TQM will undertake more urgent activities in 1987 and 1988 than it did in 1986. The Board has concluded that it is reasonable to restrict overtime for 1987 and 1988, as a proportion of salaries, to the 1986 level. Accordingly, the Board has allowed overtime pay equal to 1.50 percent of the permanent staff salaries in both the 1987 and 1988 test years. The Board's adjustments to test-year salaries re-

flecting this decision amount to \$18,200 for 1987 and \$19,800 for 1988.

6.1.2.5 Employee Benefits

TQM projected employee benefits expense of \$536,600 for 1987 and \$564,400 for 1988, compared to \$445,400 in 1986. TQM estimated each benefit separately. The Board's examination of employee benefits focussed on three items: Commission de Santé et Sécurité au Travail (C.S.S.T.), and savings plan and pension plan contributions.

C.S.S.T.

TQM projected C.S.S.T. contributions of \$18,500 and \$19,600 for the 1987 and 1988 test years, respectively. The Company stated that the program, administered by the Province of Quebec, recognizes the concept of rewards and penalties in order to create an incentive for companies to minimize accidents to their employees. The incentive takes the form of a credit which is applied to subsequent contributions once the C.S.S.T. has had an opportunity to analyze all statistics for the year. The credit in respect of a given year is known only after the year is completed and may be spread over more than one year.

The evidence showed that the reimbursements from the C.S.S.T. exceeded TQM's contributions to the C.S.S.T. in the years 1984 to 1986. The Company conceded that it had made a net gain of \$146,200 on its C.S.S.T. account over the three-year period. TQM reported that it had a favourable variance of \$16,900 in the first half of 1987.

Ontario contended that the allowance for C.S.S.T. contributions for 1987 and 1988 should be zero. Ontario noted that the issue was not one of retroactively penalizing for reimbursements but of accurately forecasting future contributions.

TQM contended that the fixed-toll methodology is designed to create the incentive to minimize costs by allowing shareholders to earn cost savings in a given year. TQM argued that it would be unfair to require the reimbursement of savings if the recovery of overruns is not permitted at the same time.

Decision

The Board has decided that the test-year forecasts of C.S.S.T. contributions for inclusion in the cost of service should take into account reimbursements by the Commission. On the basis of evidence presented, the Board agrees with Ontario that the Company's net expense for C.S.S.T. contributions should be expected to be zero for both test years. Therefore, the Board has disallowed \$18,500 and \$19,600 from employee benefits expense for the 1987 and 1988 test years, respectively.

Savings Plan

TQM projected savings plan contributions of \$104,700 and \$116,400 for the 1987 and 1988 test years, respectively. TQM contributes a maximum of 5 percent of earnings for employees who have participated in the savings plan for five years.

The evidence showed that in a survey of twelve companies, six do not have such a savings plan, and in the case of the remaining six that have a plan, contributions vary between 1.67 percent and 5 percent of earnings. TQM's plan was found to be above the median. However, the maximum employer contribution was identical to those provided by the oil and gas companies surveyed which provide this benefit. Ontario contended that TQM's plan is an unusually generous employee benefit and recommended that the Board should freeze savings plan costs allowed in tolls in both the 1987 and 1988 test years at the 1986 base-year levels. TQM argued that its plan is identical to that of TransCanada and NOVA, the joint owners of the Company. Since a number of staff were drawn from its parents, the savings plan at inception was matched with those of the parents. TQM noted that the plan, since its introduction, has been endorsed by the Board as no changes were mandated.

Decision

The Board has decided to allow the savings plan costs, adjusted for the changes in the permanent salaries. Accordingly, the test-year employee benefits expense is reduced by \$3,000 for 1987 and \$5,400 for 1988.

Pension Plan

TQM projected pension plan contributions of \$161,200 in 1987 and \$151,200 in 1988, compared to \$118,800 in 1986. Ontario contended that the increase in pension costs was unduly large and suggested a disallowance of \$34,200 in 1987. For 1988, Ontario suggested an increase equal to the inflation rate which it forecasted to be 4.50 percent. This would amount to a disallowance of \$18,500 in 1988. TQM stated that, of the \$42,400 increase from 1986 to 1987, about \$38,000 was solely on account of premium increases because of the changes in the Pension Benefits Standards Act (PBSA) and Regulations.

TQM argued that the cost of the pension plan reflects the government-mandated pension reforms, including the 60 percent automatic surviving spouse benefit, the advancing seniority of TQM employees coupled with no turnover of staff, the plan's investment results and the changes in actuarial assumptions used to estimate future plan costs. TQM contended that these elements of pension costs are complex and beyond the Company's control. The Company noted that pension plan costs are not linked with the cost of living increases.

Decision

The Board is convinced that the recent changes in the PBSA and Regulations have resulted in increased pension contributions by employers. Therefore, the Board approves the contribution amounts as requested by the Company.

6.1.3 Employee Expense

TQM applied for employee expense of \$156,600 for 1987, followed by \$166,500 for 1988. The applied-for 1987 employee expense represents a 19.80 percent increase over the 1986 actual of \$130,700 and the applied-for 1988 amount represents an increase of 6.32 percent over 1987, or a 27.40 percent increase over the 1986 actual level.

Responding to Ontario, TQM noted that the actual expenditure on employee expense for the first half of 1987 was \$57,800, or \$27,300 lower than was reflected in the Company's application. However, the Company maintained that the estimate for the year was reasonable since the under-expenditure would likely be made up in the second half of 1987,

because the timing of expenditures could not be precisely forecasted. TQM also stated that the lower estimate of the number of personnel should have little impact on employee expense.

Ontario submitted that the Board should reduce employee expense because of the lower estimate of the number of employees and the lower-than-estimated actual expenditure on this expense in the first half of 1987. Ontario recommended that the Board allow the actual expenditure for the first half of 1987, and a similar amount for the second half. For 1988, the Board should allow an increase over 1987 based on the estimated 1988 inflation rate.

Decision

The Board has no reason to believe that the amount of employee expense for the second half of 1987 will be different from the amount for the first half. The Board accordingly approves 1987 employee expenses of \$115,600. For 1988, the Board approves an increase based upon the approved 1987 forecast and the estimated 1988 inflation rate, for an allowance of \$121,400. Accordingly, the employee expense disallowances are \$41,000 for 1987 and \$45,100 for 1988.

6.1.4 Consultants Expense

TQM applied for consultants expense of \$325,300 for 1987, followed by \$296,600 for 1988. The requested 1987 expense represents an 87.80 percent increase over the 1986 actual of \$173,100, while the 1988 estimate represents a decrease of 8.80 percent from the requested amount for 1987. TQM believes that the 1987 and 1988 forecasts represent an accurate estimate of consultants expense since the Company will require advisory assistance in various areas because of the significant reduction in personnel.

Ontario submitted that TQM's projection for 1987 represents an excessive increase over 1986 and that TQM did not provide a convincing explanation for the necessity for this significant increase. In support of this position, Ontario noted that the 1986 consultants expense was \$133,000 less than the amount recovered in the toll and not consistent with actual spending for the first half of 1987, which was \$78,600 less than forecast. However, TQM envisages spending \$50,600 of the underspent amount in the second half of 1987.

In addition, Ontario submitted that TQM should be required to prioritize its consulting needs and to postpone lower priority requirements rather than to seek full recovery from tollpayers. Ontario submitted that TQM should be allowed increases in consultants expense in both test years at the expected inflation rates.

Decision

The Board notes that TQM's consultants expense has been approximately 30 percent less than the amount authorized for inclusion in the toll during the period 1984 to 1986. The Board has decided to allow consultants expense for the test years based on TQM's experience for that period. Accordingly, the requested consultants expense is reduced by 30 percent or \$97,600 for 1987, and \$89,000 for 1988. The allowed consultants expense is \$227,700 for 1987 and \$207,600 for 1988.

6.1.5 Communication Costs

TQM applied for communication costs of \$238,200 for 1987 and \$243,200 for 1988. The requested 1987 communication costs are 12.60 percent higher than the 1986 actual of \$211,600 and the applied-for 1988 costs are 2.10 percent greater than the 1987 forecast, but 14.90 percent greater than the 1986 actuals.

Responding to Ontario, TQM noted that the actual expenditure on communication costs for the first half of 1987 was \$89,800, or \$27,100 less than forecast. This was because regular telephone tolls had increased at a lower rate than anticipated, TQM had cancelled a long-distance line in 1987 rather than in 1988, and the Company had used less long distance and messenger services than forecasted. TQM anticipated spending \$6,700 more than forecasted in the second half on a telephone modification.

Based on its review of 1986 actuals, Ontario stated that communication costs are fairly steady from the first to the second half of the year. Since there were no significant expenditures foreseen in the second half of 1987, Ontario submitted that TQM should be allowed second-half communication costs equal to the first half of 1987, plus the \$6,700 required for the telephone modification. For 1988, an increase equal to the forecast inflation rate should be allowed.

Decision

The Board has no reason to believe that communication costs for the second half of 1987 will be significantly different from those for the first half. The Board therefore approves \$186,300 for communication costs for 1987, being twice the first-half actual plus \$6,700 for the proposed telephone modification. For 1988, the Board approves an increase based upon the forecast inflation rate for an allowance of \$195,600.

6.1.6 Legal Expense

The Company applied for legal costs of \$100,000 for 1987 and \$80,000 for 1988. The requested 1987 costs are 34.40 percent higher than the 1986 actual of \$74,400 and the applied-for 1988 costs are 20 percent lower than 1987, but 7.50 percent higher than the 1986 actuals.

The Company stated that the projected increase in 1987 was because of higher legal costs following the deregulation of natural gas prices. TQM's response to Ontario showed that legal costs for the first half of 1987 were \$26,900 less than forecasted. The Company stated that it was difficult to assess the exact timing of the incurrence of legal costs since the Company has little control over matters such as scheduling and duration of hearings. However, with the exception of \$8,500 of legal costs incurred in the first half of 1987 and paid in the second, the Company required less legal service than originally anticipated.

Ontario proposed that TQM's 1987 legal costs be based on the actual first-half expense plus TQM's revised second-half forecast. This would result in 1987 legal costs of \$81,600 with a corresponding disallowance of \$18,400. The Company's 1988 legal costs were not disputed.

Decision

Because the Company required less legal service than it had originally forecasted, the Board approves as legal expense for 1987 the actual for the first half of the year plus the revised forecast for the second half. The approved legal expense is therefore \$81,600, with a corresponding reduction of \$18,400. Legal expense for 1988 is approved as requested by the Company.

6.1.7 Regulatory Expenses

TQM applied for regulatory expenses of \$395,800 for 1987, followed by \$431,300 for 1988. The Company stated that, although the current toll application will set tolls for 1988 as well as 1987, it is the Company's intention to apply to the Board during 1988 for new tolls to be effective 1 January 1989. The Company expects that the hearing would take place in 1988 to enable the Board to render its decision before 1 January 1989. TQM included in the 1987 forecast an estimate of \$303,000 to cover the cost of the current toll proceeding, and in the 1988 forecast an estimate of \$318,400 to cover the cost of the hearing expected in 1988 to set 1989 tolls.

Decision

The Board has decided to allocate half of the forecasted 1987 hearing expense to 1988 since the 1987 proceedings are setting tolls for both years, and to defer the 1988 hearing costs to 1989. Accordingly, the regulatory expenses for 1987 are reduced by \$151,650 and the 1988 regulatory expenses are reduced by \$166,750, as shown in Table 6-3.

Table 6-3
Regulatory Expenses

	1987	1988
TQM Hearings	\$303,300	\$318,400
TCPL Hearings	45,400	63,400
Other Hearings	<u>47,100</u>	<u>49,500</u>
Total	395,800	431,300
Adjustments:		
1987 TQM Hearing		
Allocated 50% to 1988	(151,650)	151,650
1988 Expense Deferred	<u>—</u>	<u>(318,400)</u>
Approved Regulatory Expenses	<u>\$244,150</u>	<u>\$264,550</u>

6.2 Municipal and Other Taxes

TQM applied for approval of municipal and other taxes of \$1,948,000 for 1987 and \$2,003,000 for 1988. Responding to Ontario, the Company stated that the municipal taxes had been estimated on the basis of the bills for the 1986 municipal and school taxes. In its application, TQM assumed that municipal and other taxes would increase by 4 percent in 1987 and 5 percent in 1988. The Company had subsequently received more updated taxation information.

Ontario submitted that, while the original 1987 forecast seemed reasonable when it was made, the subsequent receipt of the 1987 tax assessments permitted more accurate updated estimates. On that basis, Ontario submitted that the 1987 municipal and other taxes were best calculated on the basis of the total municipal tax bill for 1987 and the total school tax bill for 1986/87 (the school taxes are billed for a twelve-month period ending 30 June of each year). In addition, Ontario submitted that the percentage change in municipal and school taxes thus calculated for 1987 over 1986 would be the best basis for calculating 1988 taxes.

Decision

The Board has reviewed the methodology proposed by Ontario to estimate the amount of municipal and other taxes. The Board agrees that this methodology permits a more current estimate of municipal and other taxes. The Board therefore approves \$1,919,000 for 1987 and \$1,940,000 for 1988 municipal and other taxes, as proposed by Ontario. The corresponding reductions are \$29,000 for 1987 and \$63,000 for 1988, as shown in Table 6-4.

Table 6-4
Adjustments to Municipal and Other Taxes

	1986	1987	1988
Municipal Taxes	\$966,000	\$ 992,000	
School Taxes	<u>172,000</u>	<u>170,000</u>	
Total	<u>\$1,138,000</u>	<u>\$1,162,000</u>	<u>\$1,186,000¹</u>
Other Taxes	89,000	94,000	
Capital Taxes	<u>668,000</u>	<u>660,000</u>	
Total Approved	1,919,000	1,940,000	
Applied For by TQM	<u>1,948,000</u>	<u>2,003,000</u>	
Disallowed	<u>\$ 29,000</u>	<u>\$ 63,000</u>	

1 The 1988 municipal and school taxes are based on the 1987 taxes adjusted by the percentage change from 1986 to 1987.

Chapter 7

Tariff Matters

TQM applied for tolls for 1987 and 1988 determined in conformity with the fixed-toll method of regulation established by the Board in TQM's first toll case in 1983. The monthly toll proposed by TQM is one-twelfth of the revenue requirement for the test years. The requested and approved revenue requirements for the 1987 and 1988 test years are shown in these Reasons for Decision in Tables 2-1 and 2-2, respectively.

Decision

As in previous decisions, the Board considers the fixed-toll methodology to be appropriate for the Company. The Board has adjusted various components of the Company's requested revenue requirements, as described in preceding chapters of these Reasons for Decision. Total approved revenue requirements of \$76,701,000 for 1987 and \$72,456,000 for 1988 have resulted from these proceedings. Accordingly, the Board approves monthly tolls of \$6,392,000 for 1987 and \$6,038,000 for 1988.

7.1 Storage Revenue

The Company deducted from the 1988 revenue requirement \$79,000 of estimated revenue from the storage service which TQM will perform for GMi. As discussed in Section 4.2, the Board has approved a deferral account to record the difference between estimated and actual

revenues. For the performance of this service, the Company proposed a toll that is calculated as the sum of the storage and injection charge. The storage charge is the average over the term of the contract of the sum of the annual depreciation amount for the cost of the storage facilities and the return at the allowed rate of return on rate base on the undepreciated balance. The injection charge is calculated as the product of the volume stored and the commodity rate of 88.25 cents per thousand cubic metres.

Decision

The Board has reviewed the proposed method for calculating the revenue from the storage service and the estimated revenue for the 1988 test year and finds it to be reasonable. The Board approves the proposed method and the estimated storage revenue proposed by the Company.

7.2 Carrying Charges on Toll Adjustments

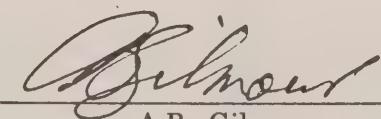
TQM requested that the computation of interest on any refund or recovery pursuant to Section 52.2 of the Act recognize the fact that the toll for a given month is not received by the Company until the 20th of the following month.

Decision

The Board has reviewed the Company's proposal and accepts it as being reasonable.

Chapter 8 Disposition

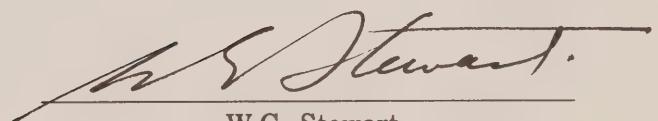
The foregoing chapters, together with Board Order No. TG-8-87, constitute our Reasons for Decision and our Decision on this matter.



A.B. Gilmour
Presiding Member



J.R. Jenkins
Member



W.G. Stewart
Member

Ottawa, Canada
November 1987

Appendix I

File: 1562-T28-7
12 May 1987

HEARING ORDER RH-4-87 DIRECTIONS ON PROCEDURE

Trans Québec & Maritimes Pipeline Inc. (TQM) Application for Tolls Effective 1 January 1987 and 1 January 1988

By application dated 6 April 1987 Trans Québec & Maritimes Pipeline Inc. ("TQM" or "the Applicant") applied to the National Energy Board ("the Board") for certain orders respecting tolls under Part IV of the National Energy Board Act. Prior to the receipt of that application, the Board had, on 15 December 1986, issued Order TGI-55-86 to TQM authorizing interim tolls to be charged by TQM for the period commencing 1 January 1987 and ending when the Board issues its final order with respect to TQM's tolls.

In its application, TQM proposed that the application be dealt with in a manner similar to that adopted for TQM's last toll hearing. In those proceedings, all issues other than rate of return were dealt with in writing.

On 21 April 1987, the Board declared its intention to deal with certain specific issues such as rate of return by way of an oral hearing, and to deal with the remainder of the issues by written submission. In this regard, interested parties were invited to identify other issues that they wished to address by way of the oral hearing.

Having considered the application and the submissions of interested parties, the Board decided on 12 May 1987 to proceed as follows:

- (a) the Board will hold an oral hearing on the specific issue of rate of return as identified in Appendix IV;
- (b) all other issues will be dealt with by written submission; and

(c) the hearing will conclude with oral argument and reply on all issues.

Accordingly, the Board directs as follows:

PUBLIC VIEWING

1. The Applicant shall deposit and keep on file, for public inspection during normal business hours, a copy of the application in its offices at 870, boulevard de Maisonneuve est, Montréal, Québec, H2L 1Y6. A copy of the application is also available for viewing during normal business hours in the Board's Library, Room 962, 473 Albert Street, Ottawa, Ontario, K1A 0E5 and at the Board's Calgary office, 4500-16th Avenue, N.W., Calgary, Alberta, T3B 0M6.

INTERVENTIONS

2. Interventions are required to be filed with the Secretary and served on the Applicant by 11 June 1987. Interventions should include all the information set out in subsection 32(1) of the *Revised Draft NEB Rules of Practice and Procedure* dated 21 April 1987.
3. Intervenors wishing to raise matters not addressed in TQM's application should so indicate at the time of filing their intervention.
4. The Secretary will issue a list of intervenors shortly after 11 June 1987.

INFORMATION REQUESTS

5. Information Requests addressed to the Applicant are required to be filed with the Secretary and served on all other parties by 3 July 1987.
6. The Applicant's response to information requests received within the specified time limit shall be filed with the Secretary and

served on all parties to the proceeding by 17 July 1987.

7. Information requests to Intervenors are required to be filed with the Secretary and served on all other parties by 11 August 1987.
8. Intervenors' responses to information requests received within the specified time limit shall be filed with the Secretary and served on all other parties by 25 August 1987.

WRITTEN SUBMISSIONS AND WRITTEN EVIDENCE

9. Any additional written evidence that the Applicant wishes to present, including its written submission on all issues not being considered in the oral portion of the hearing, shall be filed with the Secretary and served on all other parties to the proceeding by 18 June 1987.
10. Intervenor written evidence, including written submissions on all issues not being considered in the oral portion of the hearing, is required to be filed with the Secretary and served on all other parties to the proceeding by 28 July 1987.

LETTERS OF COMMENT

11. Letters of comment are required to be filed with the Secretary and served on the Applicant by 26 June 1987.

HEARING

12. The oral portion of the public hearing will commence in the Board's hearing room, 473 Albert Street, Ottawa, Ontario, on Monday, 28 September 1987 at 1:00 p.m.

SERVICE TO PARTIES

13. The Applicant shall serve a copy of these Directions on Procedure and the Notice of Public Hearing, attached as Appendix I, forthwith on all parties identified in Appendix II.

NOTICE OF HEARING

14. The publications in which the Applicant is required to publish the Notice of Public Hearing on or before 1 June 1987 are listed in Appendix III.

LIST OF ISSUES

15. The issues to be addressed by oral hearing and by written submission are identified in Appendix IV.

FILING AND SERVICE REQUIREMENTS

16. Where parties are directed by these Directions on Procedure or by the *Draft NEB Rules of Practice and Procedure* to file or serve documents on other parties, the following number of copies shall be served or filed:
 - i) for documents to be filed with the Board, provide 30 copies;
 - ii) for documents to be served on the Applicant, provide 3 copies; and
 - iii) for documents to be served on intervenors, provide 1 copy.

17. Parties filing or serving documents at the hearing shall file or serve the number of copies specified in the preceding paragraph.

18. Persons filing letters of comment should serve one copy on the Applicant and file one copy with the Board, which in turn will provide copies for all other parties.

19. Parties filing or serving documents less than four business days prior to the commencement of the hearing shall also bring to the hearing a sufficient number of copies of the documents for use by the Board and other parties present at the hearing.

SIMULTANEOUS INTERPRETATION

20. The proceeding will be conducted in either of the official languages and simultaneous interpretation will be provided.

GENERAL

21. All parties are asked to quote Hearing Order No. RH-4-87 when corresponding with the Board in this matter.

22. These directions supplement the *Revised Draft NEB Rules of Practice and Procedure* dated 21 April 1987.

23. For information on this hearing or the procedures governing the hearing contact Mrs. Kathy Pope, Regulatory Support Officer, at (613) 990-3208.

J.S. Klenavic
Secretary

**Appendix I
to Order RH-4-87**

**Trans Québec & Maritimes Pipeline Inc.
Application for Tolls Effective 1 January 1987 and
1 January 1988**

The National Energy Board ("the Board") will conduct a hearing into an application dated 6 April 1987 by Trans Québec & Maritimes Pipeline Inc. ("the Applicant") pursuant to Part IV of the National Energy Board Act for, among other things, orders respecting the tolls which the Applicant may charge for the transmission of natural gas as of 1 January 1987 and 1 January 1988.

The Board has decided to deal with rate of return issues by means of an oral hearing. All other issues will be examined by way of written submission. The oral portion of the hearing will commence on Monday, 28 September 1987 at 1:00 p.m. in the Board's hearing room, 473 Albert Street, Ottawa, Ontario. The hearing will conclude with oral argument and reply on all issues.

The hearing will be public and will be held to obtain the evidence and relevant views of interested parties on the application.

Anyone wishing to intervene in the hearing must file a written intervention with the Secretary of the Board and serve a copy on the Applicant at 870, boulevard de Maisonneuve est, Montreal, Québec. The Applicant will provide a copy of the application to each intervenor.

The deadline for receipt of written interventions is 11 June 1987. The Secretary will then issue a list of intervenors.

Anyone wishing only to comment on the application should write to the Secretary of the Board and send a copy to the Applicant.

The deadline for receipt of comments is 26 June 1987.

Information on the procedures for this hearing RH-4-87 or the *NEB Revised Draft Rules of Practice and Procedure* dated 21 April 1987 governing all hearings (both documents available in English and French) may be obtained by writing to the Secretary or telephoning the Board's Regulatory Support Office at 998-7204.

John S. Klenavic
Secretary
National Energy Board
473 Albert Street
Ottawa, Ontario
K1A 0E5

Telecopier No. 990-7900
Telex No. 053-3791

12 May 1987.

**Appendix II
to Order RH-4-87**

LIST OF PARTIES

All parties pursuant to Order No. RH-2-86;

All other parties who have expressed an interest in the matters raised in the application; and

Assistant Deputy Minister for Energy
Ministry of Energy, Mines and Petroleum
Resources
Parliament Buildings
Victoria, B.C.
V8V 1X4

Senior Solicitor
Department of Energy and Natural Resources
10th Floor, South Tower
Petroleum Plaza
9915 - 108th Street
Edmonton, Alberta
T5K 2C9

Attention: Mr. Geoffrey Ho

Attorney General for the Province of Saskatchewan
Department of Justice
8th Floor, 1874 Scarth Street
Regina, Saskatchewan
S4P 3V7

Attention: Mr. Greg Blue

Attorney General for the Province of Manitoba
Legislative Buildings
Winnipeg, Manitoba
R3C 0V8

Director
Legal Branch, 12th Floor
Ministry of Energy
56 Wellesley Street West
Toronto, Ontario
M7A 2B7

Procureur général du Québec
Edifice Delta
1200 route de l'église
Ste Foy, Québec
G1R 4X7

Me. Jean Giroux
Service juridique du Ministère de l'énergie et des ressources
200B, chemin Ste Foy, 6^e étage
Québec, Québec
G1R 4X7

Attorney General for the Province of New Brunswick
Legislative Buildings
Fredericton, New Brunswick
E3B 5H1

Office of the Deputy Minister
Nova Scotia Department of Mines and Energy
P.O. Box 1087
1690 Hollis Street
Halifax, N.S.
B3J 2X1

Minister of Justice and Attorney General
Province of Prince Edward Island
Province House
Charlottetown, P.E.I.
C1A 7N8

Attorney General for the Province of Newfoundland
Confederation Building
St. John's, Newfoundland
A1C 5T7

Commission Secretary
British Columbia Utilities Commission
4th Floor
800 Smythe St.
Vancouver, B.C.
V6Z 2E1

General Manager
British Columbia Petroleum Corporation
6th Floor
1199 West Hastings Street
Vancouver, B.C.
V6E 3T5

Manager, Regulatory Affairs
Canadian Petroleum Association
3800, 150 Sixth Avenue S.W.
Calgary, Alberta
T2P 3Y7

Manager, Regulatory Affairs
Independent Petroleum Association of Canada
700, 707-7th Avenue S.W.
Calgary, Alberta
T2P 0Z2

Secretary,
Alberta Petroleum Marketing Commission
1900, 250 Sixth Avenue S.W.
Calgary, Alberta
T2P 3H7

Vice-President, Corporate Secretary
Canadian Gas Association
55 Scarsdale Road
Don Mills, Ontario
M5B 2R3

Industrial Gas Users Association
170 Laurier Avenue West
Suite 804
Ottawa, Ontario
K1P 5V5

**Appendix III
to Order RH-4-87**

LIST OF PUBLICATIONS

Publications	City
"Herald"	Calgary, Alberta
"The Edmonton Journal" & "Le Franco-Albertain"	Edmonton, Alberta
"The Leader-Post" and "Journal l'eau-vive"	Regina, Saskatchewan
"The Winnipeg Free Press"	Winnipeg, Manitoba
"La Liberté"	St. Boniface, Manitoba
"The Globe and Mail", "Star" "Financial Times of Canada", "The Financial Post" and "L'Express"	Toronto, Ontario
"The Citizen" & "Le Droit"	Ottawa, Ontario
"The Gazette", "Le Devoir" & "La Presse"	Montreal, Québec
"Le Soleil" & "The Chronicle Telegraph"	Québec, Québec
"Le Matin"	Moncton, N.B.
"Canada Gazette"	Ottawa, Ontario

**Appendix IV
to Order RH-4-87**

LIST OF ISSUES

A. The following issues will be considered in the oral portion of the hearing:

1. Rate of return
 - rate of return on equity
 - cost of short-term unfunded debt
 - capital structure
 - short-term debt deferral account.
- B. The following issues will be considered by written submission:
 1. Wages, salaries and employee benefits,
 2. Person-years,
 3. Cost escalation factors employed by TQM,
 4. Forecasts of operating and maintenance expenses other than (2) above,
 5. Income taxes,
 6. Miscellaneous gas plant in service, and
 7. Other issues identified in the interventions.

Appendix II

ORDER NO. TG-8-87

IN THE MATTER OF the National Energy Board
Act ("the Act") and the Regulations made
thereunder;

AND IN THE MATTER OF an application by
Trans Québec & Maritimes Pipeline Inc.
("TQM") made under Part IV of the Act for
certain orders respecting tolls and tariffs, filed
with the Board under File No. 1562-T28-7.

BEFORE:

A.B. Gilmour
Presiding Member

J.R. Jenkins
Member

W.G. Stewart
Member

WHEREAS by application dated 6 April 1987, as revised, TQM sought approval by the Board, effective 1 January 1987 and 1 January 1988, of fixed transportation tolls for transmission of natural gas through its pipeline facilities;

AND WHEREAS by Order No. TG-3-86, dated 15 August 1986, the Board ordered TQM to charge, in respect of the transportation service provided to TransCanada PipeLines Limited, a monthly toll of \$6.832 million commencing 1 October 1986;

AND WHEREAS by Order No. TGI-55-86, dated 19 December 1986, the Board ordered that, effective 1 January 1987, the toll established by and the tariff filed in accordance with Order No. TG-3-86 be an interim toll and an interim tariff;

AND WHEREAS by Order No. AO-1-TGI-55-86 the interim toll of \$6.832 million set by Order No. TGI-55-86 was reduced to \$6.502 million, effective 1 August 1987;

AND WHEREAS pursuant to Order No. RH-4-87 the Board examined and heard the written and oral evidence of TQM and all interested parties with respect to the said application;

AND WHEREAS the Board has determined a just and reasonable monthly toll for the 1987 test year of \$6.392 million and for the 1988 test year of \$6.038 million;

IT IS ORDERED THAT:

1. TQM shall, for accounting, toll-making and tariff purposes, implement procedures conforming to the Board's decisions outlined in the Reasons for Decision dated November 1987 and with this Order.
2. TQM shall charge, in respect of its transportation service provided to TransCanada PipeLines Limited, a monthly toll of \$6.038 million commencing 1 January 1988.
3. TQM shall refund to TransCanada PipeLines Limited on 31 December 1987 the amount of \$3.774 million being the part of the tolls charged by TQM under Board Order Nos. TGI-55-86 and AO-1-TGI-55-86 that is in excess of the tolls determined by the Board to be just and reasonable together with interest thereon. This amount is comprised of principal in the amount of \$3.520 million and interest in the amount of \$0.254 million, calculated using the approved rate of return on rate base.
4. TQM shall charge Gaz Métropolitain, inc., in respect of storage services, a toll based upon the TS-GMi tariff attached to the Transportation and Storage Service Contract filed with the Board under covering letter dated 10 April 1987.
5. TQM shall file with the Board and serve upon all parties to the proceedings held pursuant to

Board Order No. RH-4-87, gas transportation tariffs incorporating the toll set out in paragraph 2 and in conformity with the decisions outlined in the Board's Reasons for Decision.

6. Those provisions of TQM's tariffs which specify a toll other than the toll specified in paragraph 2 are hereby disallowed, such disallowance to be effective on 31 December 1987.

NATIONAL ENERGY BOARD

J.S. Klenavic
Secretary

Appendix III

**Determination of Approved Funded Debt Balances
and Associated Cost Rates for the Test Years**
(\$000)

	1987		
	Series A¹	Series B¹	Series C¹
January 1	100,000	100,000	85,000
January 31	100,000	100,000	85,000
February 28	100,000	100,000	85,000
March 31	100,000	100,000	85,000
April 30	100,000	100,000	85,000
May 31	100,000	100,000	85,000
June 30	100,000	100,000	85,000
July 31	100,000	100,000	85,000
August 31	100,000	100,000	85,000
September 30	100,000	100,000	85,000
October 31	100,000	100,000	85,000
November 30	100,000	100,000	85,000
December 31	<u>100,000</u>	<u>100,000</u>	<u>85,000</u>
Total	<u>1,300,000</u>	<u>1,300,000</u>	<u>1,105,000</u>
13-Point Average²	<u>100,000</u>	<u>100,000</u>	<u>85,000</u>

1 Source: Exhibit B-26, Part V Requirements, Section 15, Page 3 of 12.

2 Calculated in a manner consistent with the Company's rate base determination.

**Determination of Approved Funded Debt Balances
and Associated Cost Rates for the Test Years**

1987			
	Average Gross Proceeds (\$000)	Financial Charges (\$000)	Cost Rate (%)
13.10% Series A ¹	100,000	13,100	
13.20% Series B ¹	100,000	13,200	
11.70% Series C ¹	<u>85,000</u>	<u>9,945</u>	
	285,000	36,245	12.72
Amortization of Debt Issuance Costs		<u>582²</u>	<u>20</u>
Total	<u>285,000</u>	<u>36,827</u>	<u>12.92</u>

1 Source: Exhibit B-2, Part V Requirements, Section 15, Page 6 of 12.

2 Source: Exhibit B-2, Part V Requirements, Section 15, Page 4 of 12.

**Determination of Approved Funded Debt Balances
and Associated Cost Rates for the Test Years
(\$000)**

1988			
	Series A¹	Series B¹	Series C¹
January 1	100,000	100,000	85,000
January 31	100,000	100,000	85,000
February 29	100,000	100,000	85,000
March 31	100,000	100,000	85,000
April 30	100,000	100,000	85,000
May 31	100,000	100,000	85,000
June 30	100,000	100,000	85,000
July 31	100,000	100,000	85,000
August 31	100,000	100,000	85,000
September 30	100,000	100,000	85,000
October 31	100,000	100,000	85,000
November 30	100,000	100,000	85,000
December 31	<u>100,000</u>	<u>96,000</u>	<u>85,000</u>
Total	<u>1,300,000</u>	<u>1,296,000</u>	<u>1,105,000</u>
13-Point Average²	<u>100,000</u>	<u>99,692</u>	<u>85,000</u>

1 Source: Exhibit B-26, Part V Requirements, Section 15, Page 8 of 12.

2 Calculated in a manner consistent with the Company's rate base determination.

**Determination of Approved Funded Debt Balances
and Associated Cost Rates for the Test Years**

1988			
	Average Gross Proceeds (\$000)	Financial Charges (\$000)	Cost Rate (%)
13.10% Series A ¹	100,000	13,100	
13.20% Series B ¹	99,692	13,159	
11.70% Series C ¹	<u>85,000</u>	<u>9,945</u>	
	284,692	36,204	12.72
Amortization of Debt Issuance Costs	—	<u>582²</u>	<u>.20</u>
Total	284,692	36,786	12.92

1 Source: Exhibit B-2, Part V Requirements, Section 15, Page 11 of 12.

2 Source: Exhibit B-2, Part V Requirements, Section 15, Page 9 of 12.

Canadä